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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/566,277	01/30/2006	Toshihiro Kasai	285127US0PCT	5672
22850	7590	06/12/2008	EXAMINER	
OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			REDDY, KARUNA P	
			ART UNIT	PAPER NUMBER
			1796	
			NOTIFICATION DATE	DELIVERY MODE
			06/12/2008	ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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<b>Office Action Summary</b>	<b>Application No.</b> 10/566,277	<b>Applicant(s)</b> KASAI ET AL.	
	<b>Examiner</b> KARUNA P. REDDY	<b>Art Unit</b> 1796	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 March 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,3-8 and 10-13 is/are pending in the application.
- 4a) Of the above claim(s) 7,8 and 10-13 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

1. This office action is in response to amendment filed 3/28/2008. Claims 1, 3-6 are amended; claims 2 and 9 are cancelled; and claims 7-8, and 10-13 are withdrawn. Claims 1, and 3-6 are currently pending in the application.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.
3. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:
  1. Determining the scope and contents of the prior art.
  2. Ascertaining the differences between the prior art and the claims at issue.
  3. Resolving the level of ordinary skill in the pertinent art.
  4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
4. Claims 1 and 3-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bentley et al (US 4,232,135).

Bentley et al disclose coating composition in which the film forming material consists of (a) disperse phase particles i.e. polymer microparticles stably dispersed in (b)

a continuous phase (abstract). Two-pack systems are within the scope of Bentley et al's invention (column 2, lines 56-58). The two pack systems are obtained by mixing together first and second liquid constituents (column 2, lines 64-68). The polymeric microparticles include a polymer of one or more  $\alpha,\beta$ -ethylenically unsaturated monomers (column 3, lines 22-25). The microparticles may be plasticized with an inert plasticizer (column 3, lines 60-61). It is the examiner's position that microparticles are dispersed in the plasticizer, because Bentley refers to a microparticle i.e. polymer in the form of a particle is dispersed in plasticizer. See example 6 wherein the polymer microparticle is made from methyl methacrylate, methacrylic acid, azodiisobutyronitrile (reads on radical polymerization initiator of present claim 3) and graft copolymer obtained by copolymerizing glycidyl methacrylate adduct (reads on epoxy resin of present claim 6).

The continuous phase liquid may be either a single liquid or a homogeneous liquid mixture of two or more substances. Suitable are addition copolymers of the thermosetting type, provided that they are of low molecular weight and include copolymers of vinyl monomers such as methyl methacrylate (column 9, lines 35-55). Each of the two constituents of two-pack is a mixture of two reactive substances (column 10, lines 13-15). In cases where the continuous phase is based on a thermosetting resin, suitable reactive liquids are low molecular weight compounds containing free hydroxyl groups, (column 10, lines 30-34) exemplified by glycol (reads on plasticizer of claim 4 and hydroxy group containing organic solvent of claim 5).

Bentley et al fail to disclose a two-pack composition wherein acrylic polymeric particles are soluble in organic solvent; and the gelation time.

However, while Bentley's examples are directed to continuous phase in which the polymeric microparticles are insoluble, it is noted that exemplification is not a

requirement for a proper 103 rejection. Given that, attention is drawn to Bentley et al's disclosure which teaches that, when a cured film is required to exhibit a full gloss, it may be advantageous if the microparticles can flow and such microparticles will be of the non-crosslinked type (column 3, lines 50-55). In cases where the polymer is not crosslinked, it would be soluble in the continuous liquid phase (column 3, lines 38-40). Therefore, it would have been obvious to use a non-crosslinked polymeric particle which will be soluble in the continuous phase of Bentley et al, for obtaining a cured film with full gloss.

With respect to the gelation time, in light of the fact that composition of Bentley et al comprises substantially similar components as that of the instant invention, one of ordinary skill in the art would have a reasonable basis to believe that the composition would exhibit similar properties including a gelation time, as measured at 30<sup>0</sup>C, of one hour or less. Since PTO cannot conduct experiments, the burden of proof is shifted to the applicants to establish an unobviousness difference. See *In re Best*, 562 F.2d 1252, 195 USPQ 430 (CCPA 1977).

### ***Response to Arguments***

5. Applicant's arguments, see page 5, lines 13-17, filed 3/28/2008, with respect to objection have been fully considered and are persuasive. The objection of claims 2-5 has been withdrawn in view of the cancellation of claim 2, and thus objection to claims 3-5 because of their dependence on claim 2.

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6. Applicant's arguments with respect to rejection of claim 1 under 35 U.S.C. 102(b) as being anticipated by Kim et al (US 5, 288, 804); claims 1-2 and 6 under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Takegawa et al (US 4, 386, 992); claims 1-2 and 4 under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Wilkins (GB 1,157,436); claim 5 under 35 U.S.C. 103(a) as being unpatentable over Takegawa et al (US 4, 386, 992); and claims 2-4 and 6 under 35 U.S.C. 103(a) as being unpatentable over Kim et al (US 5, 288, 804); have been considered but are moot in view of the new ground(s) of rejection necessitated by amendment.
7. Applicant's arguments filed 3/28/2008 have been fully considered but they are not persuasive. Applicant's specifically argue that because all pending claims are in condition for allowance, the withdrawn claims 7, 8 and 10-13 which depend from, and thus recite all features, of allowable claim 1 should be rejoined. However, present claims are not in condition for allowance and thus the prerequisites for rejoinder are not met.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KARUNA P. REDDY whose telephone number is (571)272-6566. The examiner can normally be reached on Monday-Friday.

#### ***Contact Information***

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (571) 272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business

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Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Karuna P Reddy/  
Examiner, Art Unit 1796

/VASUDEVAN S. JAGANNATHAN/  
Supervisory Patent Examiner, Art Unit 1796